

# THE MOONBOUNCE GROUP

## PART 1



The 432 MHz, 128-element extended-expanded collinear array of ZE5JJ. The gain of the array is 24 dBi and the 3 dB beamwidth is 12.6°.





Fig. 1. Dave Olean, K1WHS, and his operating position. The antenna for 144 MHz moon-bounce work is a 160-element collinear on a polar mount. The final amplifier uses a pair of 4CX250B tubes.



Fig. 2. Don Falle, VE2DFO, holding on to his 5CX1500A 144 MHz final amplifier. Some 144 MHz moonbounce QSL's can be seen behind Don.

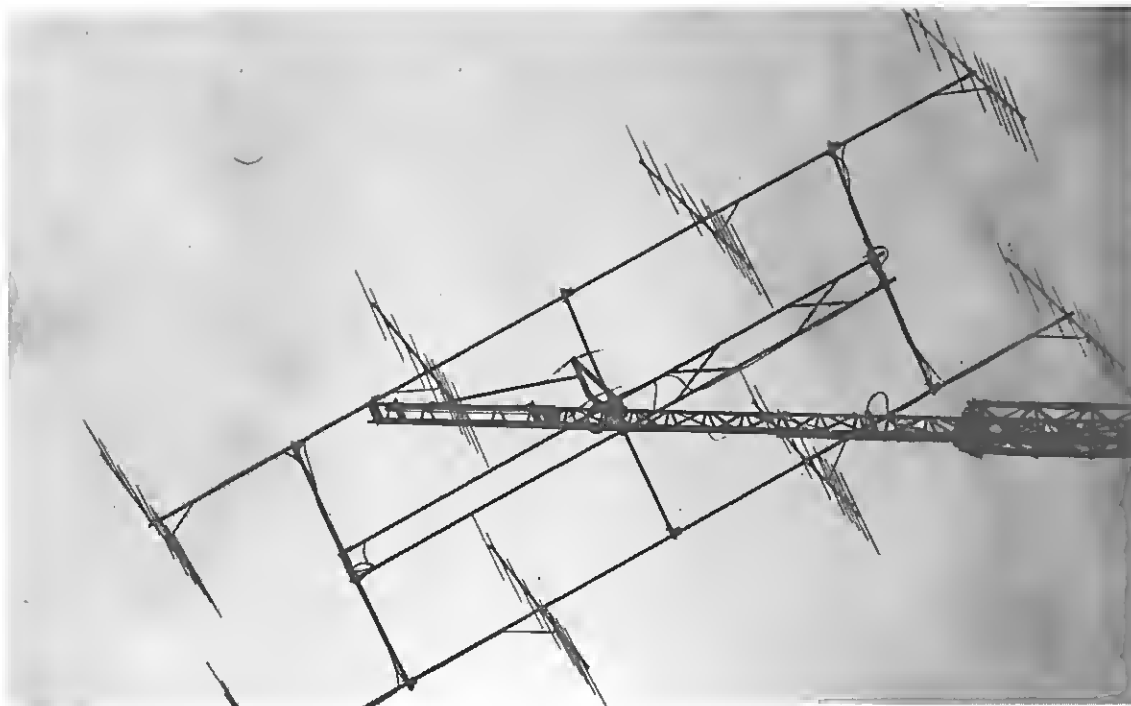


Fig. 3. The 144 MHz array of Floyd Jury, W30LV. The array consists of eight 9-element KLM log-periodic Yagi antennas.

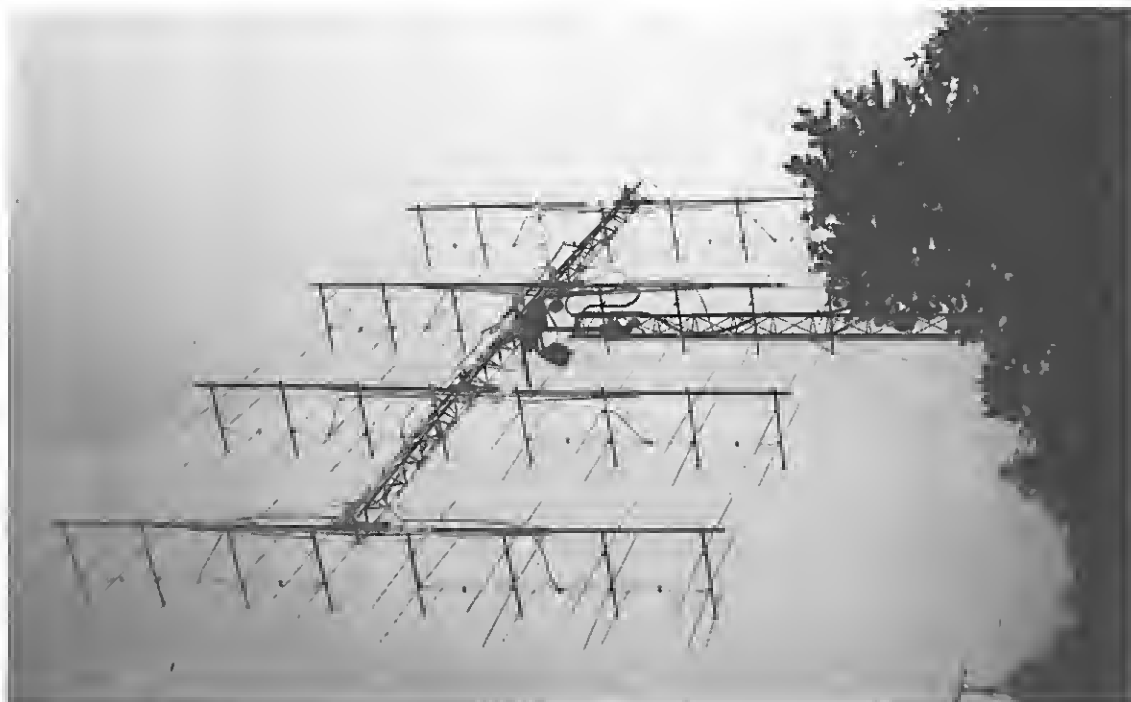


Fig. 4. The 160-element array of Paul Wolfe, K8III, using Cushcraft collinear beams. Paul is working on a larger array.



Fig. 5. Mike Staal, K6MYC, is holding one end of the modularized WA6LET 432 MHz receiving converter. Bud Westfall, K60JM, is reading the meter.



Fig. 6. The neatly organized station of Carl Scheideler, W2AZL. Carl has had 144 MHz EME success by using the horizon and by tilting over his tower.



Fig. 7. Takashi Kumamoto, JA6DR, at his operating position. Takashi has copied VK5MC and WA6LET on 144 MHz EME.

Fig. 8. The 144 MHz array of JA6DR is made up of sixteen 9-element Yagi antennas and is on an az-el mount.

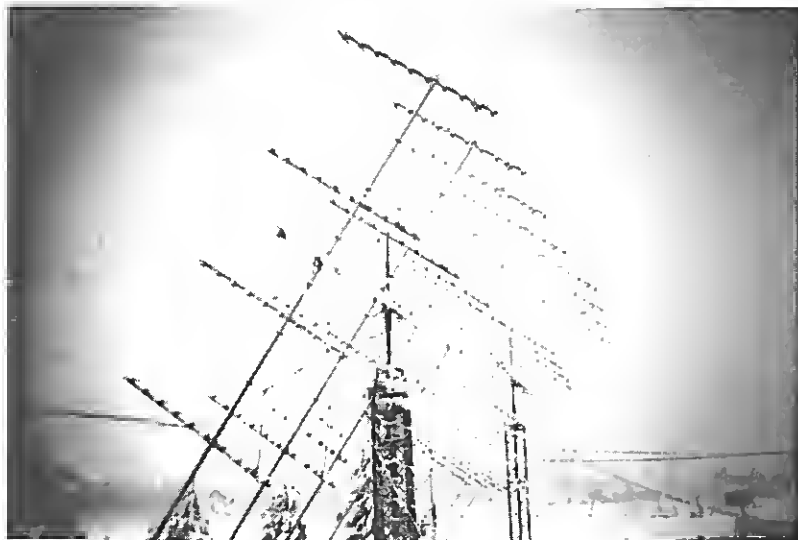
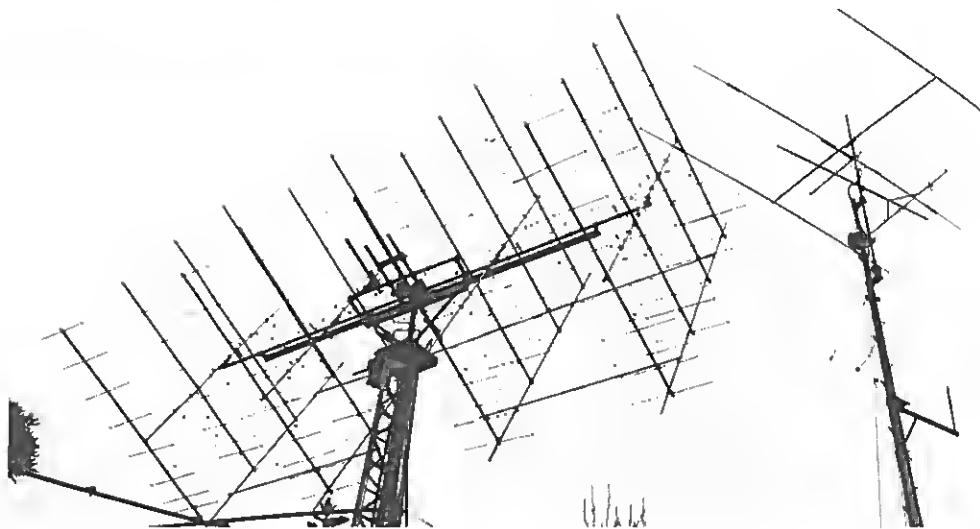


Fig. 9. The 352-element 432 MHz array of JA3ZBE. Note the snow and ice on the array! This situation occurred during the SRI 432 MHz EME tests.



Fig. 10. Only 10 feet to go! The 144 MHz 160-element col-linear array of W4DFK being hoisted into position. W4UPJ and W4UGE are working on the tower.

Fig. 11. The array of W8KPY which eventually turned out to be big enough! The array consisted of sixteen 12-element KLM 144 MHz log-periodic Yagi antennas. Each triangular aluminum boom is 30 feet long.

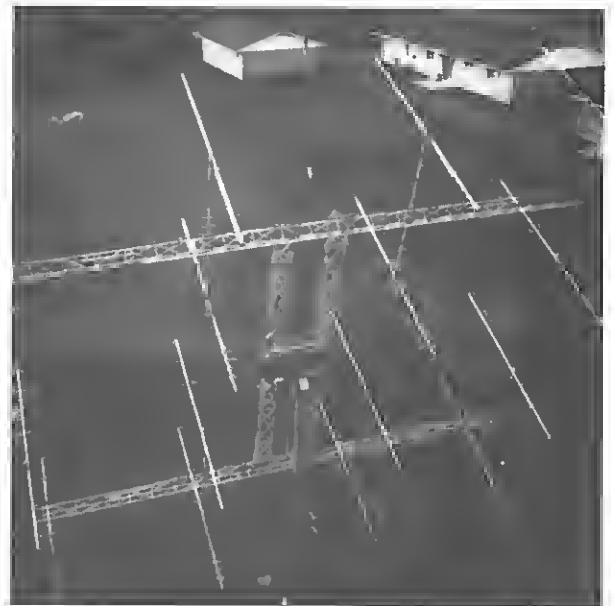


Fig. 12. The 144 MHz array of Walt Cummings, K9UIF. The antennas are 16-element KLM log-periodic Yagis.



Fig. 13. Rheinhard Koch, DK1KO, at his operating position. Rheinhard's 144 MHz antenna array consists of four 16-element Yagis with a gain of about 22 dB. His final amplifier uses a pair of 4CX250B tubes.

Fig. 14. Peter Carey, ZE5JJ, and his organized operating position. Peter's 432 MHz collinear array is pictured on the front of this bulletin. The final amplifier uses a pair of 4CX250B tubes delivering 650 watts of output power.

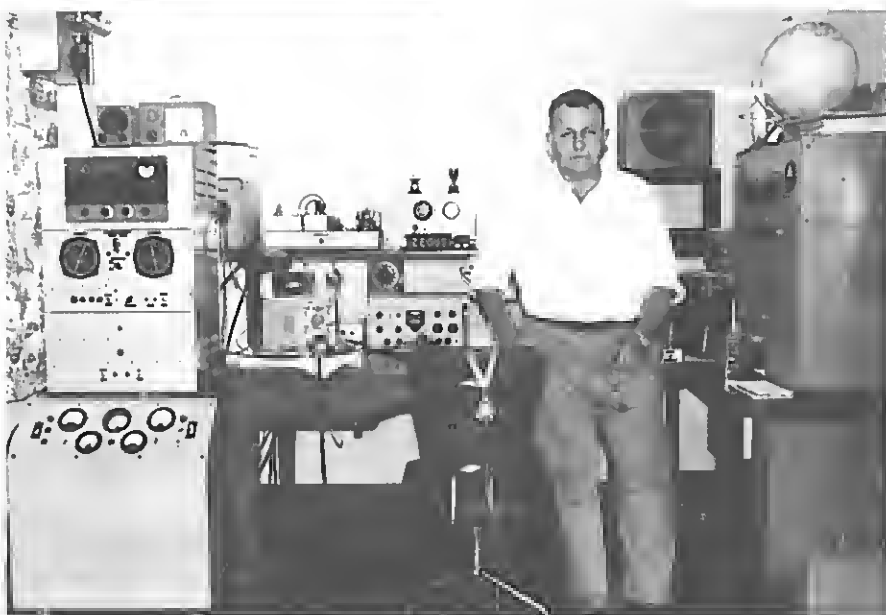


Fig. 15. As you can see from the QSL cards, Guy Titman, W4NUS, has been very successful on 432 MHz EME. His antenna is a 128-element extended-expanded collinear array. His final amplifier is a 4CX250K.

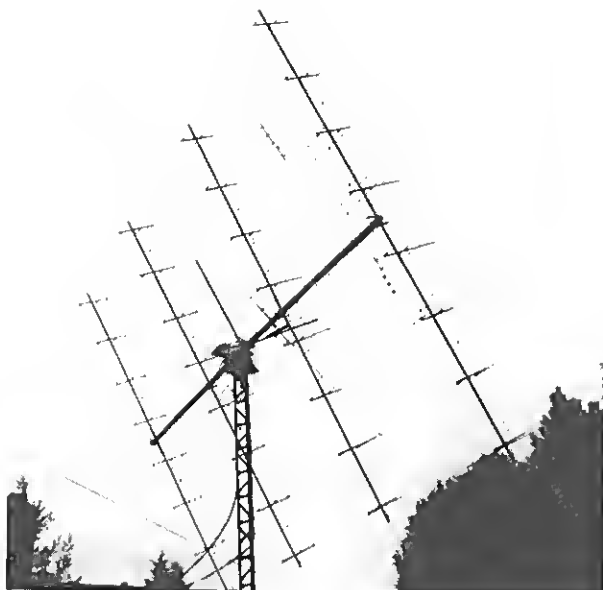


Fig. 16. On the left is the 160-element collinear array of Lionel Edwards, VE7BQH. On the right is Lionel and his transmitting equipment.



Fig. 17. On the left is Cor Maas, VE7BBG, seated at his operating position. Cor uses a single 4CW800F in his 432 MHz final amplifier. The 20 foot homemade dish antenna with a 0.5 F/D is shown on the right.



Fig. 18. This is Marshall Williams, WA5UNL, standing in the middle of his 240-element 144 MHz Cushcraft collinear array. Marshall uses a 3CX1000A7 in his final amplifier.



Fig. 19. Steve Powlishen, WA1FFO, in his well-equipped station. Steve's antenna is an array of four 12-element 144 MHz KLM log-periodic Yagi antennas. His final amplifier uses an 8877 tube.

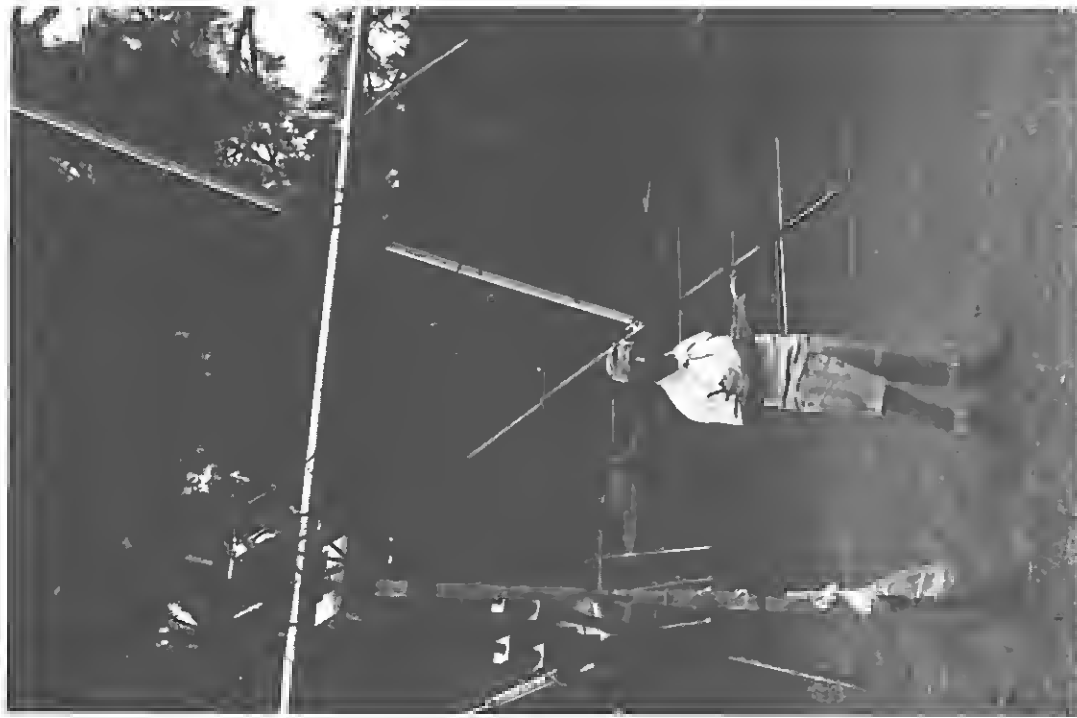


Fig. 20. John Perchalski, K4IXC, has his 56-element array low enough for easy aiming and maintenance. The Yagi to John's left is the 7-element wooden boom design once described in the ARRL VHF Handbook. Eight of the Yagis are used in the array. John's final amplifier uses a pair of 4CX250B tubes.



Fig. 21. Kjell Rasmussen, SM7BAE, is well-known on 144 MHz for his outstanding EME signal. His antenna is an array of sixteen 10-element Yagis. His final amplifier uses a pair of 4CX250B tubes.



Fig. 22. Orville Burg, K5VWW, did an excellent job on this array of four 14-element 144 MHz KLM log-periodic Yagis to provide an easy way to change the elevation of an "H-frame" mounted array. A future EME Bulletin will describe the mechanism in more detail. Orville's final amplifier uses an 8877.

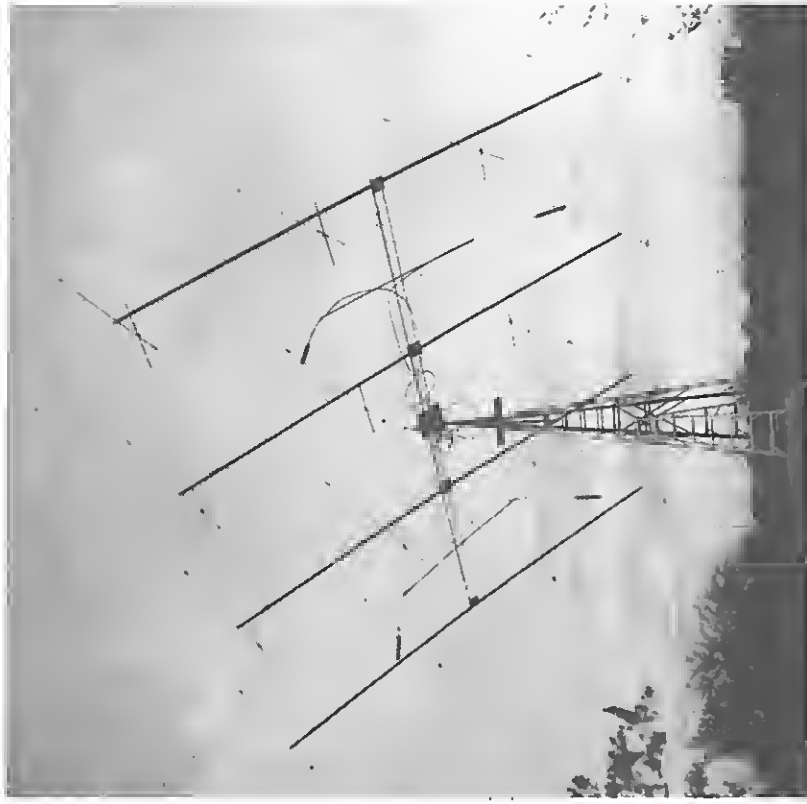


Fig. 23. The 144 MHz array of Tom Schrum, K7NII. The array consists of sixteen 8-element Yagis, all homemade. All power dividers and baluns are also homemade. The overall antenna size is 33' x 30'. The picture was taken before the azimuth and elevation motors were installed. Tom's final amplifier uses a pair of 4CX250B tubes.



Fig. 24. Ken Erickson, W7JRG, uses an array of four 14-element 144 MHz KLM log-periodic Yagi antennas. Ken's final amplifier uses a pair of 4CX250B tubes.

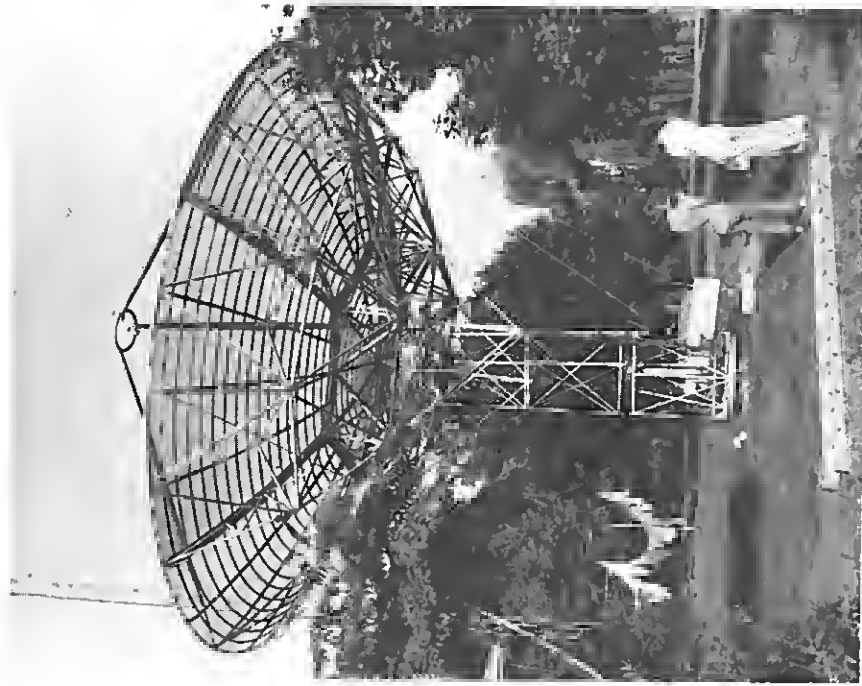


Fig. 25. This is the well-known 28 foot dish used on 432, 1296 and 2304 MHz by Al Katz, K2UYH. Doug Moser, WA2LTM, works with Al on the EME project